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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/600,720 | 06/20/2003 | Scott D. Shaw | 40850.0100 | 5846 |
| 20322 | 7590 | 04/22/2004 | EXAMINER | |
| SNELL & WILMER ONE ARIZONA CENTER 400 EAST VAN BUREN PHOENIX, AZ 850040001 | | | CYGAN, MICHAEL T | |
| | | ART UNIT | | PAPER NUMBER |
| | | | | 2855 |

DATE MAILED: 04/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|------------------------|---------------------|
| Office Action Summary | Application N . | Applicant(s) |
| | 10/600,720 | SHAW, SCOTT D. |
| | Examiner | Art Unit |
| | Michael Cygan | 2855 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on ____.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-30 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-30 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 26 January 2004 is/are: a) accepted or b) objected to by the Examiner.

 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date *12 December 2003*.
4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
5) Notice of Informal Patent Application (PTO-152)
6) Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1. Claim 6 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The "seal test device" is not described in the specification or drawings in full, clear, or exact terms such that one of ordinary skill in the art would understand its structure, use, or function in the claimed system.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 9, 12-14, 16, and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Chriswell (US 5,808,188). Chriswell discloses the claimed

invention, a flow testing system comprising flow amplifier subsystem [101], venturi [102], pipe coupling [131,136], output coupling subsystem [108,105], and pressure difference flow device [118] for determining defects in a test head H, and the use of preset endcaps having standard orifices for self-testing and calibration; see Figures 2 and 5, and columns 3-4 and column 7 lines 4-20.

3. Claims 1, 9, 10, 12-14, and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Zaim (US 5,081,864). Zaim discloses the claimed invention, a flow testing system comprising flow amplifier subsystem [17,20], venturi [40], pipe coupling [18], output coupling subsystem [21,22], and pressure difference flow device [41,42,43] having a controlled feedback loop for determining defects in an annular space [13]; see Figure 1 and column 3 line 10 through column 4 line 59.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zaim (US 5,081,864) in view of Henry (US 6,715,343 B1). Zaim

discloses the claimed invention except for the use of a filter valve. Henry discloses the use of a filter valve [114,196,198] in a system having monitored air flow (see abstract). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a filter valve as taught by Henry in the invention taught by Zaim to act as the valve (i.e., valve 20), since this would advantageously filter the incoming air and prevent contamination of the vessel interior or venturi nozzle.

5. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chriswell (US 5,808,188). Chriswell discloses the claimed invention except for the claimed flow ranges. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the claimed flow ranges, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

6. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zaim (US 5,081,864). Zaim discloses the claimed invention except for the claimed flow ranges. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the claimed flow ranges, since it has been held that where the general conditions of a claim

are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

7. Claims 1, 4, 5, 7-9, 11-15, and 22-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kral (US 6,412,334 B1) in view of Chriswell (US 5,808,188). Kral discloses a closed-loop flow testing system and method for using the system comprising a flow amplifier subsystem [24], piping subsystem [26], resistive temperature measurement device [54] for temperature compensation of measured pressure, and coupling subsystem [18]; pressure is applied after an initial connection of the quick-connector [18], and before subsequent connections (since the test is repeated at least three times); the quick connector inherently comprises multiple plates and sealing rings. See Figure 3 and column 3 line 26 through column 6 line 19.

Kral teaches the claimed invention and method except for the leakage pressure meter being a venturi meter having fore and aft pressure detectors to detect leakage flow and/or controlled air flow. Chriswell teaches a leakage pressure meter being a venturi meter having fore and aft pressure detectors to detect leakage flow and/or controlled air flow in a leakage pressure testing system; see Figures 2 and 5, and columns 3-4 and column 7 lines 4-20. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a venturi meter having fore and aft pressure detectors to detect leakage flow and/or controlled air flow in a leakage

pressure testing system as taught by Chriswell in the invention taught by Kral to measure leakage flow, since Chriswell teaches such venturi devices to be advantageous for detecting leakage flow and/or controlled air flow in a leakage pressure testing system.

With respect to the claimed flow ranges, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the claimed flow ranges, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

8. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chriswell (US 5,808,188) in view of Adkins (US 5,214,969). Chriswell discloses the claimed invention except for an automatic positioning system. Adkins teaches the use of a robot device [503] acting as an automatic object positioning system for testing objects; see Figure 1 and abstract. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a robot device acting as an automatic object positioning system for testing objects as taught by Adkins in the invention taught by Chriswell to position the test objects, since such automatic devices reduce operator error.

9. Claims 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chriswell (US 5,808,188) in view of Gotchel (US 4,311,037). Chriswell discloses the claimed invention except for the use of a pressure flow device having an ambient input port to facilitate flow calculations motivating a control system. Gotchel teaches the use of a pressure flow device having an ambient input port to facilitate flow calculations motivating a control system; see Figure 3 and column 5 lines 37-50. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a pressure flow device having an ambient input port to facilitate flow calculations motivating a control system as taught by Gotchel in the invention taught by Chriswell to measure and control flow, since Gotchel teaches that this advantageously enables a desired volumetric flow of air through the test device and orifice.

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Flow testers using venturi meters are disclosed by Naedler (US 5,767,398), Gastaldo (US 4,078,421), Witschi (US 5,600,996), Johnson (US 3,696,666), and Mueller (DE 4012054 A1). Test systems having similar properties are disclosed by Kershaw (US 3,808,876) and Rees (US 5,808,909).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Cygan whose telephone number is (571) 272-2175. The examiner can normally be reached on 8:30-6 M-Th, alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on 571-272-2180. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Michael Cygan
Primary Examiner
Art Unit 2855